

NEW NORTH AMERICAN PISIDIA.

BY V. STERKI.

Pisidium ashmuni n. sp.

Mussel somewhat elongate, moderately inequipartite; scarcely oblique, moderately inflated; superior and inferior margins moderately curved, supero-anterior slope curved down to the rounded anterior end situated well below the median line; posterior end subtruncate, with more or less of an angle at the scutum; beaks somewhat posterior, rather broad, rounded, moderately elevated over the hinge margin; surface shining, with microscopic, shallow, rather regular, crowded striae, and one or a few impressed lines of growth: color pale horn, shell translucent, thin; hinge slight, plate narrow; cardinal teeth rather long, fine, lamellar, the right curved with its anterior end much shorter and situated much higher up on the plate than the posterior which is somewhat thickened; left anterior of the same shape as the right, rather hook-like at its anterior end, the posterior oblique, slightly curved and passing over about two-thirds of the anterior; lateral teeth rather long, produced far beyond the pointed cusps; outer laterals of the right valve slight but distinct; ligament rather slight.

Size: Long. 2.8, alt. 2.3, diam. 1.6 mill.

Long. 2.3, alt. 1.9, diam. 1.4 mill.

Most specimens are intermediate.

Habitat: San Rafaels, New Mexico, collected by Rev. E. H. Ashmun, in whose honor the species has been named.

Pis. ashmuni ranges under the *abditum* group. It is easily recognized, being of about the same size with *Pis. splendidulum* St. It is more elongate and its beaks are broader.

Pisidium danielsi n. sp.

Mussel slightly inequipartite, moderately and regularly inflated, outlines nearly short oval; all margins well curved, or the posterior subtruncate, anterior end rounded, rather below the median line; angles at the scutum and scutellum not marked in most specimens, slightly so in some; umbones little posterior, low, slightly projecting over the hinge margin, moderately broad, each with a depression below the apex and above a slightly raised, concentric ridge; surface with somewhat coarse, subregular and sharp striae, and a few coarser

lines of growth, rather dull and microscopically rugulose; color grayish white to yellowish horn, in some specimens slightly plumbeous around the beaks; shell moderately thick, nacre white, muscle insertions distinct but not impressed; hinge rather stout, plate rather broad; right cardinal tooth strongly curved over a deep excavation, its posterior part thickened and grooved to bifid, the left anterior strongly curved and rather massive, placed rather high up on the plate, the posterior oblique, curved, its anterior part reaching to or over the middle of the anterior; lateral teeth stout, the cusps rather short, the outer ones in the right valve rather small but well formed; ligament strong.

Size: Long. 4.5, alt. 3.9, diam. 2.6 mill.

Habitat: Marsh from a spring on Lake James, Steuben Co., Indiana, numerous specimens collected by Mr. L. E. Daniels, of the Indiana Geological Survey, in whose honor the species is named. During the season of 1902 Mr. Daniels has collected many and interesting *Pisidia* and *Sphæria*, especially in northern Indiana, a section from which very little had been known.

The present species has some resemblance with—typical—*Pis. strengii*, but in the latter species the outlines are more angular, the beaks narrower and more prominent and rounded, the striation is finer, and the hinge slighter. *Pis. danielsi* is of special interest. From the features of the surface, the beaks and the hinge, there is no doubt but that it ranges under the same group with *P. compressum*, *kirklandi*, *cruciatum*, *fallax*, etc., although the rounded outlines, the low beaks, and the moderate and regular convexity would suggest rather the contrary at first sight. Young specimens, however, have an unmistakable similarity of the outlines with those of *Pis. compressum* Pr. In some of the specimens the beaks are broader, and the depression and ridge are less marked or almost obsolete, just as it is with certain forms of *Pis. compressum*.

Pisidium obtusale C. Pfr.

At the same place as the preceding Mr. Daniels has collected numerous specimens which are distinct from all North American species described, but exactly like *Pis. obtusale* from several places of Europe, and appear to be identical with that species. They are rather large and almost globular; long. 3.6, alt. 3.1, diam. 2.6 mill. It is to be expected that the same will be found also at other places.